- 5.10. Lilis, R., Fibrous Zeolites and Endemic Mesothelioma in Cappadocia, Turkey, *J. Occ Medicine*, 1981, 23,(8),548–550.
- 5.11. Occupational Exposure to Asbestos—1972, U.S. Department of Health, Education and Welfare, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, HSM-72–10267.
- 5.12. Campbell, W.J., et al, Relationship of Mineral Habit to Size Characteristics for Tremolite Fragments and Fibers, United States Department of the Interior, Bureau of Mines, Information Circular 8367, 1979.
- 5.13. Mefford, D., DCM Laboratory, Denver, private communication, July 1987.
- 5.14. Deer, W.A., Howie, R.A., Zussman, J., Rock Forming Minerals, Longman, Thetford, UK, 1974.
- 5.15. Kerr, P.F., *Optical Mineralogy;* Third Ed. McGraw-Hill, New York, 1959.
- 5.16. Veblen, D.R. (Ed.), Amphiboles and Other Hydrous Pyriboles—Mineralogy, Reviews in Mineralogy, Vol 9A, Michigan, 1982, pp 1–102.
- 5.17. Dixon, W.C., Applications of Optical Microscopy in the Analysis of Asbestos and Quartz, ACS Symposium Series, No. 120, Analytical Techniques in Occupational Health Chemistry, 1979.
- 5.18. Polarized Light Microscopy, McCrone Research Institute, Chicago, 1976.
- 5.19. Asbestos Identification, McCrone Research Institute, G & G printers, Chicago, 1987.
- 5.20. McCrone, W.C., Calculation of Refractive Indices from Dispersion Staining Data, The Microscope, No 37, Chicago, 1989.
- 5.21. Levadie, B. (Ed.), Asbestos and Other Health Related Silicates, ASTM Technical Publication 834, ASTM, Philadelphia 1982.
- 5.22. Steel, E. and Wylie, A., Riordan, P.H. (Ed.), Mineralogical Characteristics of Asbestos, *Geology of Asbestos Deposits*, pp. 93–101, SME-AIME, 1981.
- 5.23. Zussman, J., The Mineralogy of Asbestos, Asbestos: Properties, Applications and Hazards, pp. 45-67 Wiley, 1979.
- $[51\ FR\ 22733,\ June\ 20,\ 1986,\ as\ amended\ at\ 51\ FR\ 37004,\ Oct.\ 17,\ 1986;\ 52\ FR\ 17754,\ 17755,\ May\ 12,\ 1987;\ 53\ FR\ 35625,\ September\ 14,\ 1988;\ 54\ FR\ 24334,\ June\ 7,\ 1989;\ 54\ FR\ 29546,\ July\ 13,\ 1989;\ 54\ FR\ 52027,\ Dec.\ 20,\ 1989,\ 55\ FR\ 3731,\ Feb.\ 5,\ 1990;\ 55\ FR\ 34710,\ Aug.\ 24,\ 1990;\ 57\ FR\ 24330,\ June\ 8,\ 1992;\ 59\ FR\ 41057,\ Aug.\ 10,\ 1994;\ 60\ FR\ 9625,\ Feb.\ 21,\ 1995;\ 60\ FR\ 33344,\ June\ 28,\ 1995;\ 60\ FR\ 33984-33987,\ June\ 29,\ 1995;\ 61\ FR\ 5508,\ Feb.\ 13,\ 1996;\ 61\ FR\ 43457,\ Aug.\ 23,\ 1996;\ 61\ FR\ 5508,\ Feb.\ 13,\ 1996;\ 61\ FR\ 43457,\ Aug.\ 23,\ 1996;\ 61\ FR\ 16672,\ 16673,\ Apr.\ 3,\ 2006;\ 71\ FR\ 50188,\ Aug.\ 24,\ 2006;\ 73\ FR\ 75584,\ Dec.\ 12,\ 2008]$

§ 1910.1002 Coal tar pitch volatiles; interpretation of term.

As used in §1910.1000 (Table Z-1), coal tar pitch volatiles include the fused

polycyclic hydrocarbons which volatilize from the distillation residues of coal, petroleum (excluding asphalt), wood, and other organic matter. Asphalt (CAS 8052-42-4, and CAS 64742-93-4) is not covered under the "coal tar pitch volatiles" standard.

[48 FR 2768, Jan. 21, 1983]

§ 1910.1003 13 Carcinogens (4-Nitrobiphenyl, etc.).

- (a) Scope and application. (1) This section applies to any area in which the 13 carcinogens addressed by this section are manufactured, processed, repackaged, released, handled, or stored, but shall not apply to transshipment in sealed containers, except for the labeling requirements under paragraphs (e)(2), (3) and (4) of this section. The 13 carcinogens are the following:
- 4-Nitrobiphenyl, Chemical Abstracts Service Register Number (CAS No.) 92933; alpha-Naphthylamine, CAS No. 134327; methyl chloromethyl ether, CAS No. 107302;
- methyl chloromethyl ether, CAS No. 107302; 3,'-Dichlorobenzidine (and its salts) CAS No. 91941;
- bis-Chloromethyl ether, CAS No. 542881; beta-Naphthylamine, CAS No. 91598; Benzidine, CAS No. 92875; 4-Aminodiphenyl, CAS No. 92671; Ethyleneimine, CAS No. 151564;
- beta-Propiolactone, CAS No. 57578; 2-Acetylaminofluorene, CAS No. 53963;
- 4-Dimethylaminoazo-benezene, CAS No. 60117; and
- N-Nitrosodimethylamine, CAS No. 62759.
- (2) This section shall not apply to the following:
- (i) Solid or liquid mixtures containing less than 0.1 percent by weight or volume of 4-Nitrobiphenyl; methyl chloromethyl ether; bis-chloromethyl ether; beta-Naphthylamine; benzidine or 4-Aminodiphenyl; and
- (ii) Solid or liquid mixtures containing less than 1.0 percent by weight or volume of alpha-Naphthylamine; 3,'-Dichlorobenzidine (and its salts); Ethyleneimine; beta-Propiolactone; 2-Acetylaminofluorene; 4-Dimethylaminoazobenzene, or N-Nitrosodimethylamine.
- (b) *Definitions*. For the purposes of this section:
- Absolute filter is one capable of retaining 99.97 percent of a mono disperse aerosol of $0.3 \, \mu m$ particles.

Authorized employee means an employee whose duties require him to be